Industrial Lands Inventory for Greater Vancouver 2005

FINAL DRAFT REPORT

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GVRD Policy and Planning Department

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Executive Summary

A detailed GIS and parcel-based Industrial Lands Inventory was prepared for Greater Vancouver for 2005. The purpose of this study and inventory was to:

- Estimate how much land is allocated for industrial use in Greater Vancouver and where those industrial lands are located within the region; and;
- Estimate how much of the industrial land base is currently utilized by industry, and how much is vacant (not currently utilized by industry, but designated for future industrial development).

The current inventory is being conducted as part of the research program supporting the Livable Region Strategic Plan review. A key purpose of the regional growth management strategy is to ensure an adequate supply of land to support a diverse, efficient, and robust regional economy.

The inventory was prepared by the GVRD and its consultants in 2005. The Greater Vancouver Industrial Lands Task Group provided guidance on methodology, input on the technical parameters, and feedback on draft findings. The Task Group included representatives from member municipalities, the real estate brokerage community, the Province, ports and airport authorities, and the academic community.

In 2005, there were 26,089 acres (10,558 ha) of industrial land in Greater Vancouver. Approximately 74% of the industrial land base, or 19,230 acres (7,782 ha), includes properties that are wholly or partially utilized for industrial activities. The remaining 26% of the industrial land supply, or 6,859 acres (2,775 ha), is classified as "*vacant*", defined for the purposes of this study as *not currently utilized for industrial purposes, but designated for future industrial development.* This vacant land supply is a "gross" estimate and may currently be occupied by residential uses, have environmental, servicing or other development constraints.

Over 62% of the region's total industrial land supply, and over 80% of the vacant industrial land, is located south of the Fraser River. A further 11% of the vacant industrial land is located in the Northeast sector and Ridge-Meadows subregions. The City of Surrey alone contains 46% of the region's vacant industrial land supply.

In addition to the remaining vacant land capacity, it is assumed there is additional development capacity available on currently developed sites which are under-utilized. Recent Cushman & Wakefield LePage figures show that the amount of floor space located on industrial land continues to rise, despite a decline in the total acres of industrial land in the region. This suggests that a significant amount of new industrial development is occurring through building expansion or redevelopment.

Distribution of Greater Vancouver's Industrial Land by Subregion, 2005

Subregions	Developed Industrial Land (acres)	Vacant Industrial Land (acres)	Total Industrial Land (acres)	Regional Share
North Shore	957	107	1,064	4.1%
Vancouver	1,533	89	1,623	6.2%
Burnaby / New Westminster	3,198	396	3,595	13.8%
Northeast Sector	2,407	389	2,797	10.7%
Richmond	3,114	1,167	4,280	16.4%
Delta	2,402	447	2,849	10.9%
Surrey / White Rock	3,376	(1) 3,129	6,506	24.9%
Langleys	1,651	779	2,430	9.3%
Ridge - Meadows	591	356	947	3.6%
Greater Vancouver	**19,230**	**(2) 6,859**	**26,089**	**100.0%**

Notes:

The term vacant includes all properties designated, but not currently utilized, for industrial activity.

(1) A large proportion of the designated vacant industrial land in the City of Surrey is currently occupied by non-industrial residential uses. In addition, Surrey estimates that approximately 700 acres of industrial designated lands would not be available in the future due to open space preservation and environmental protection.

(2) Approximately 700 acres of designated vacant industrial lands are located on properties under federal jurisdiction (Vancouver International Airport, Vancouver Port Authority, Fraser River Port Authority, North Fraser Port Authority).

All figures are approximate.

The amount of vacant industrial land in the inner (Vancouver and middle ring areas of the region is limited. Industrial land is needed in all subregions in order to provide city-serving industrial activities, a diversity of jobs, proximity to the labour force for commuting, and efficient use of goods movement infrastructure, including, road, rail, and barge. It will be important for inner and middle ring municipalities to stabilize their existing industrial land base and find ways to use existing land more intensively for industrial uses.

As a result of concerns expressed by Task Group members on the market readiness of the vacant lands, a "broad brush" analysis on the infrastructure servicing aspect of market readiness suggests that approximately one third (2,400 acres) of the vacant industrial land could be developed within the short term (approximately 1 year), one third (2,500) available in the medium term of 2 – 10 years, and 1,960 acres available in the longer term of 10 years plus. As shown in the table below, about 90% of the long term land availability is within the City of Surrey.

Estimate of Market Ready Status of Vacant Land by Subregion, 2005

	Land Area in Acres			
Subregions	**Market Ready**	**Medium-Term**	**Long-Term**	**Total**
North Shore	29	60	18	**107**
Vancouver	89	-	-	**89**
Burnaby / New Wesminster	185	211	-	**396**
Northeast Sector	237	152	-	**389**
Richmond	929	207	31	**1,167**
Delta	25	411	11	**447**
Surrey / White Rock	487	932	1,710	**3,129**
Langleys	348	331	100	**779**
Ridge - Meadows	71	196	88	**356**
Greater Vancouver	**2,402**	**2,499**	**1,958**	**6,859**

There can be many factors affecting the availability, desirability and market readiness of the vacant industrial lands. Task Group members from municipalities and the development industry stress that the development potential of a significant portion of the vacant lands will be hindered by factors such as location, current uses, accessibility, lot assembly, soil conditions, need for pre-loading or high development costs. This study does not include a detailed assessment of potential development constraints, but cautions that such constraints could affect the availability and development potential of the vacant industrial land supply.

An industrial land demand / absorption projection was not conducted as part of this project. Based on a range of preliminary demand estimates using historical land absorption rates and taking into consideration possible development constraints, the supply of industrial land could theoretically accommodate regional development demand for the next 10 to 15 years.

The Industrial Lands Inventory provides a solid snapshot of industrial land supply in Greater Vancouver. The inventory can be used as a baseline in future years for monitoring and tracking changes and absorption of industrial land in the region. The inventory can also be used by the GVRD and member municipalities as the basis for making informed land use choices around the supply and use of industrial lands in Greater Vancouver.

Acknowledgements

The GVRD would like to thank the Greater Vancouver Industrial Lands Task Group for their input and review throughout this process. A list of Task Group members is found in Appendix A. In particular, we would like to thank Richard White, Deputy Director, Community Development of the City of North Vancouver who was the Chair of the Task Group.

To conduct the parcel-based GIS mapping, the GVRD retained Dorin Danci, a GIS consultant, between late 2004 and early 2005. The Sheltair Group assisted with the compilation of the draft report in July 2005.

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1 Introduction

1.1 Background

In 2005, the Greater Vancouver Regional District (GVRD) conducted an Industrial Lands Inventory covering the Greater Vancouver geographic area. The region-wide Industrial Lands Inventory was last updated in 1996. Since 1996, the GVRD has experienced significant population and employment growth and a considerable amount of the vacant industrial land supply has been developed.

The current inventory is being compiled as part of the research program supporting the Livable Region Strategic Plan review. The Livable Region Strategy Plan (LRSP) was adopted by the GVRD Board in 1996 and is Greater Vancouver's regional growth strategy.

Industrial activities have played an important role in Greater Vancouver's historical development and continue to provide a significant contribution to Greater Vancouver's economy. According to the Statistics Canada Labour Force Survey, over 26% of the region's labour force was employed in the industrial sector in 2004, including manufacturing, wholesale trade, construction, transportation, and utilities.

According to the 2001 Greater Vancouver Land Use Inventory, approximately 9.3% of all urban[1] land in the GVRD was designated for industrial uses in Greater Vancouver. This is second only to residential land use as percentage of the Greater Vancouver urban land area.

1.2 Purpose

The purpose of this study is to:

- Estimate how much land is allocated for industrial use in Greater Vancouver and where those industrial lands are located within the region; and,
- Estimate how much of the industrial land base is currently utilized by industry, and how much is vacant (not currently utilized by industry, but designated for future industrial development).

To fulfill this purpose, a detailed parcel-based Industrial Lands Inventory for Greater Vancouver was assembled to provide a snapshot of the region's industrial land supply for June 2005. This inventory can be used to provide a baseline for future comparisons over time.

[1] For the purposes of this report, urban is defined as all lands located within Greater Vancouver, and outside of the Green Zone as defined by the GVRD's Livable Region Strategic Plan.

This report documents the methodology and findings of the inventory at a sub-regional and municipal level. In addition, an inventory of industrial land in 41 individual industrial areas is included. The report also offers recommendations for the further development and updating of the inventory and conducting additional research.

The Industrial Lands Inventory has multiple uses. It can provide the basis for making informed land use choices around the supply and use of industrial lands by member municipalities. It can assist in the coordination of industrial land use and goods movement. Finally, the information can generally be used as an economic development tool for industrial land in the region.

1.3 Greater Vancouver Industrial Lands Task Group

In the fall of 2004, the GVRD's Technical Advisory Committee endorsed the establishment of a Greater Vancouver Industrial Lands Task Group to help guide the preparation of the inventory. The Task Group provided guidance on methodology, input on the technical parameters, and feedback on draft findings. The Task Group consisted of representatives from the GVRD, member municipalities, a Provincial representative, real estate brokerages, Vancouver International Airport Authority, port authorities, and the academic community. A list of the task members is included in Appendix A.

1.4 Report Structure

This report is organized into five sections followed by four appendices.

Section 2 presents the approach, methodology, and limitations of the study and Industrial Lands Inventory.

Section 3 discusses various factors affecting industrial land supply.

Section 4 presents the key findings from the Industrial Lands Inventory.

Section 5 provides conclusions and recommendations.

Appendix A provides a list of the Greater Vancouver Industrial Lands Task Group members.

Appendix B provides tables of the Industrial Lands Inventory broken down by municipality and sub-region.

Appendix C includes an inventory of the industrial lands in 41 major industrial areas in Greater Vancouver.

Appendix D presents the database structure for the Industrial Lands Inventory.

2 Methodology

2.1 Study and Inventory Approach

The Industrial Lands Inventory was undertaken using a comprehensive technical and consultative approach. There are two features of the current inventory that are substantially different from the 1996 inventory and provide the foundation for future updating and use of the Industrial Lands Inventory.

First, the 2005 Industrial Lands Inventory is a much more comprehensive inventory than the inventory conducted in 1996. The 2005 inventory is a GIS-based parcel inventory. With this approach, data at the smallest level of geography – individual parcels – are used for populating and querying the database. The advantage of this approach is that it facilitates maintaining and updating the database. In addition, it allows the data to be related to other databases, such as the BC Assessment Authority data, which includes additional data such as assessed values and square footage of buildings. Finally, the parcel-level approach for the database enables data to be queried at sub-municipal levels of geography, such as major industrial areas.

Second, the current inventory involved a thorough consultative process, from development of the methodology to the review of the inventory at the parcel level. Experts were involved in the review process, including representatives from the member municipalities, the real estate brokerage community, academics, and the Vancouver International Airport Authority and port authorities.

2.2 Data Sources

The following are the main data sources that were used for the Industrial Lands Inventory:

- Cadastral GIS data (Integrated Cadastral Initiative and GVRD data sources)
- BC Assessment Authority
- Land Use and Zoning GIS files from the member municipalities
- 2004 Orthophoto image (flown in Spring 2004)
- Municipal planning staff and local industrial brokerage experts

2.3 Geographic Areas

The data have been compiled at the parcel level and are summarized by individual industrial areas, municipalities, subregions, and for the GVRD as a whole.

The majority of the data in the body of the report is presented at the subregional level. There are nine subregions in the GVRD. Figure 2-1 shows the location of the subregions and the municipalities within each subregion. Chart 2-1 indicates the correspondence between municipalities and subregions.

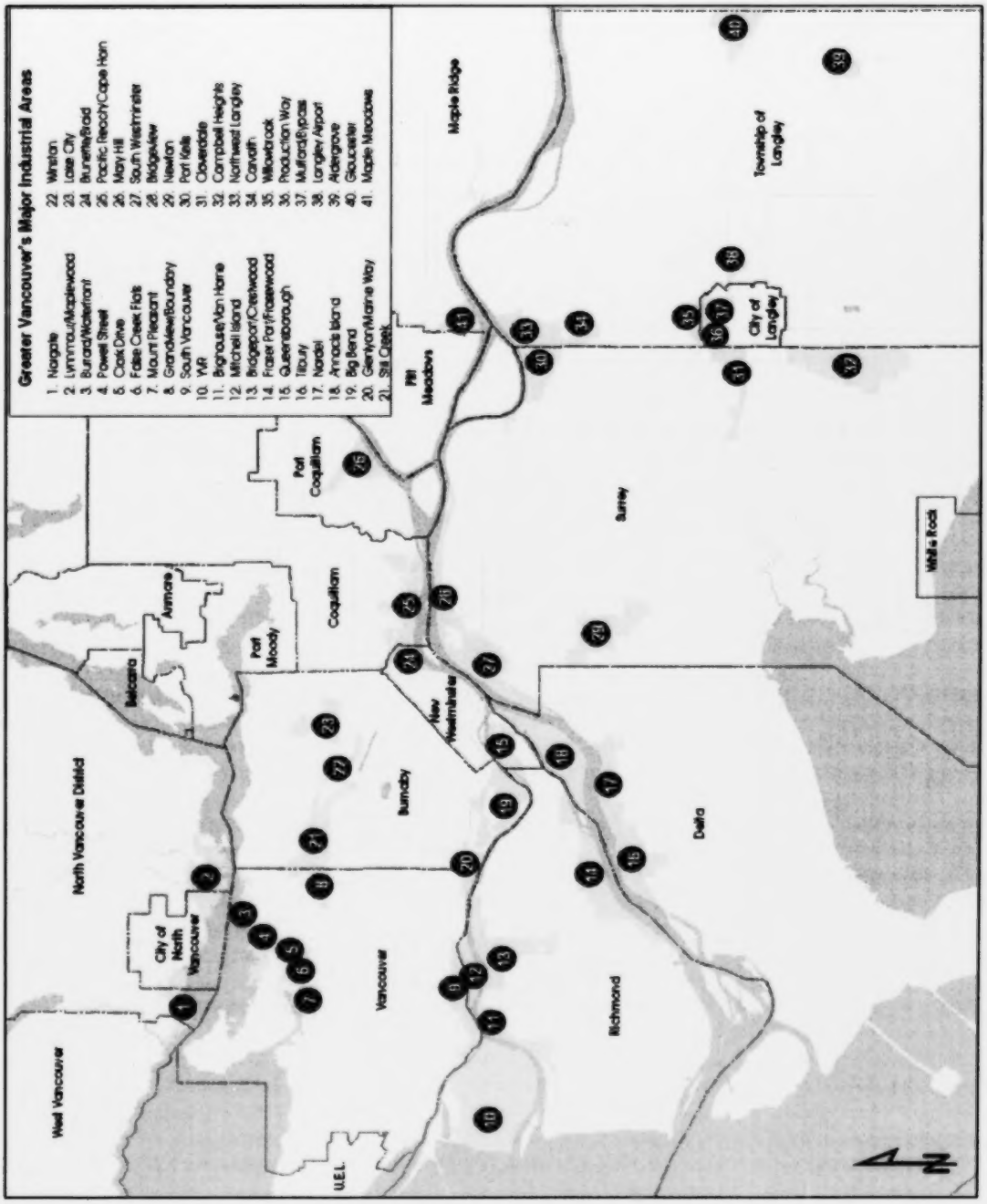
Figure 2-1: Map of the Greater Vancouver Municipalities

Chart 2-1: Correspondence Table Between Municipalities and Subregions

Subregion:	Municipalities included:
North Shore	Village of Lions Bay, Bowen Island Municipality, District of West Vancouver, City of North Vancouver, and District of North Vancouver
Vancouver	City of Vancouver and the University Endowment Lands
Burnaby / New Westminster	City of Burnaby and City of New Westminster
Northeast Sector	City of Port Moody, City of Coquitlam, City of Port Coquitlam, Village of Anmore, and Village of Belcarra
Richmond	City of Richmond (including the Vancouver International Airport)
Delta	Corporation of Delta
Surrey / White Rock	City of Surrey and City of White Rock
Langleys	City of Langley and Township of Langley
Ridge – Meadows	District of Maple Ridge and District of Pitt Meadows

There are 41 major industrial areas in Greater Vancouver. The individual industrial areas are shown in Figure 2-2 and data for these areas are summarized in Appendix C. Industrial lands on Indian Reserves are not included in this inventory.

Figure 2-2: Map of Major Industrial Areas in Greater Vancouver



2.4 Definitions

The following provides some of the key definitions used in this report:

Industrial Land – This includes land designated by municipal Official Community Plans or zoning bylaws for industrial uses such as processing, manufacturing, assembling, storage, transportation of goods or other permitted uses. However, this may also include other uses (e.g. commercial, institutional) that are permitted in industrial designations by OCP's or zoning by-laws.

Developed Industrial Land – This primarily includes properties that are OCP designated, and wholly or partially utilized for permitted industrial land use activities. This also includes a limited number of non-OCP designated properties that are zoned and developed for industrial use. A property is considered developed when it has been cleared and worked with footings in place. These properties may only be partially utilized and have additional development capacity.

Vacant Industrial Land – For the purpose of this inventory, vacant industrial land includes any industrial designated properties that are not developed for permitted industrial uses. This includes properties that are designated industrial, but are currently zoned and/or developed for uses not permitted in the industrial designation (e.g. residential, agriculture).

Zoned Industrial, but Not Designated Industrial Land – This includes properties that are zoned for industrial use, but do not have an industrial land use designation in a municipality's Official Community Plan. If such a property is currently utilized for industry, it is included in the inventory as developed. If such a property is not utilized for industry, it is not included in the inventory.

Vacant land is distinct from a vacant industrial building. If an industrial site has been developed, but is currently vacant of tenants, it would be included as "developed" in the Industrial Lands Inventory.

Market Readiness – This is a generally estimated status of vacant properties regarding the availability of infrastructure services necessary for development in the short term (< 1 year), medium term (2-10 years) and long term (10+ years). Status is based on a municipal staff overview of the proximity of adequate infrastructure services (water, sewer, drainage, roads) and the probability of when those services could be available for industrial development of the properties. However, properties may require rezoning or other development approvals, and may be subject to other development constraints.

2.5 Methodology

The Industrial Lands Inventory for 2005 was prepared using the following steps and process:

Step 1) Review of Literature

A literature review was undertaken of industrial land inventories from other jurisdictions, to identify possible parameters to include in the industrial lands database.

Step 2) Design of Database

The structure of the industrial lands database was designed to link GIS parcel data with attribute data (e.g. zoning and OCP designations) from municipalities and property characteristics from the BC Assessment Authority (BCAA). The database is designed for use at the parcel-level. The fields in the database are included in Appendix D. The design of the database considered the quality and completeness of the data as criteria for selecting fields to include. The database structure is set up as a relational database to be linked with the BCAA database, which includes assessed value and other parameters.

Step 3) Obtaining Zoning and Land Use Designation GIS data

The GVRD obtained the OCP land use designations and zoning GIS data from each of the member municipalities. A summary table of which land use designations and zoning categories permitted industrial uses was prepared and reviewed by municipal staff.

Step 4) Creation of GIS Parcel Layer

The GVRD created a Greater Vancouver-wide parcel layer to be used as the foundation for the parcel-based inventory. The data are based on municipal cadastral data files from the Integrated Cadastral Initiative (ICI) and GVRD data for areas lacking data from the ICI. A parcel identification unique identifier ("PID") was assigned to each parcel that enabled parcels to be linked to BCAA land records. A GIS consultant was retained to work exclusively on the inventory for three and a half months in late 2004 and early 2005.

The GVRD obtained the OCP land use designation and zoning GIS files from the member municipalities. The land use designation and zoning for each industrial parcel were captured and appended as fields to the parcel database.

Step 5) Identification of Developed and Vacant Industrial Lands

The next step was to identify which parcels of land were to be included in the industrial land inventory. All lands that were designated industrial were included in the inventory. In addition, properties that were not designated industrial, but were

zoned industrial and developed, were included and classified as developed. All other parcels were excluded from the initial inventory as shown in Chart 2-2.

Chart 2-2: Identification of Lands to Include in Industrial Lands Inventory

		OCP Land Use Designation	
		Designated Industrial	Designated Non-Industrial
DEVELOPED INVENTORY	Zoned Industrial	✓	✓
	Zoned Non-Industrial	✓	X
VACANT INVENTORY	Zoned Industrial	✓	X
	Zoned Non-Industrial	✓	X

✓ = included in Industrial Lands Inventory

X = not included in Industrial Lands Inventory

All the parcels in the Industrial Lands Inventory were then reviewed to identify which parcels were developed and which were vacant. First, all parcels that were zoned non-industrial (e.g. residential) but had an industrial OCP land use designation were classified as "vacant". Then a GIS overlay of the industrial parcels with 2004 aerial orthophotos was undertaken. Developed parcels were identified through air photo interpretation. A parcel was considered developed if it had the footings in place for a structure. The classification procedure enabled staff to examine or remove anomalies in the database.

Step 6) Review of Developed and Undeveloped Industrial Parcels

Large-scale hard copy maps showing individual industrial parcels were reviewed by municipalities that had large industrial land holdings as well as the Vancouver International Airport Authority and their feedback was incorporated into the database. Following this initial review, a second review was conducted with the full Greater Vancouver Industrial Lands Task Group on March 9th, 2005. This was followed by a detailed review by four of the region's largest real estate brokerage firms and the Fraser River Port Authority. More than 60 local brokers provided comments in addition to municipal and agency staff. In total, more than 500 comments were received and incorporated into the regional industrial lands database.

In May and June 2005, the updated maps were distributed to the member municipalities for final review and comment. The feedback from this version culminated in the final 2005 Industrial Lands Inventory. In total, there are 11,500 parcels included in the regional industrial lands parcel database.

Step 7) Scan of "Market Ready" Industrial Land Base

To further assess the development availability of the vacant industrial lands, a task sub-group was formed in June 2005 to classify the market readiness of the vacant land. Subsequently, in mid 2005, municipal staff was asked to review their vacant industrial land and estimate an appropriate "market ready" status for each property

based on a general assessment of the potential availability and timing of infrastructure services for the site. This feedback was incorporated into the industrial land database.

2.6 Limitations

Information on all potential development constraints was not readily available. Where available, such as the Fraser River Estuary Management Program (FREMP)[2] red-coded areas, this information was captured and these parcels were excluded. Steep slopes, setbacks from streams and water bodies, environmental constraints or sensitive areas, and lands prone to natural hazards all reduce the amount of land that is potentially developable for industrial purposes.

British Columbia Assessment Authority (BCAA) data used in the analysis of underutilized industrial lands and specifically, in the depiction of parcel characteristics (e.g., assessed land value, assessed building value, building square footage) have varying level of completeness ranging between 65% and 74%. (Refer to the table notes in Appendix C for more information.)

Further, the City of Surrey requested that the "vacant" land category be qualified regarding land supply and availability. The City has provided further assessment of the City's 'vacant' land allocation to indicate that about 1,485 acres are currently occupied by non-industrial uses, 420 acres are planned for open space or alternate uses, and 260 acres would be protected for their environmental value. To maintain regional consistency in the parcel- based data and methodology, the tables in this report do not reflect Surrey's net land supply estimates. However, a note has been included in the executive summary to indicate Surrey's qualifying information.

[2] For more information, please refer to http://www.bieapfremp.org/fremp/managementplan/colourcoding.html

3 Industrial Land Supply Sources and Factors Affecting Supply

3.1 Sources of Industrial Land Supply

The overall amount of industrial land supply is determined by the amount of land designated by land use plans in each of the member municipalities. The properties are not necessarily zoned for industrial use. There are a small number of properties within the region that are zoned for industrial uses, but not designated for industrial use by municipal plans. These properties are included as developed within the inventory totals.

3.2 Development of Industrial Lands

Industrial designated properties are categorized as developed or vacant, with both having future development potential. Vacant properties include sites that are not currently used for industrial activities, and are available to be developed. Vacant properties include 'greenfield' sites that have never been developed, as well as 'brownfield' sites have previously been developed for a variety of non-industrial uses.

Although the developed properties are currently utilized by industry, many of those properties are underutilized sites that can be further developed or redeveloped. An important aspect of future industrial capacity is the development potential of under-utilized sites.

3.3 Factors Affecting Industrial Land Supply

There are various factors that can affect the development capacity of industrial lands. These factors include:

- Environmental constraints
    - Stream and water body setbacks
    - Environmentally sensitive areas
    - Contaminated sites
- Natural hazard constraints
    - Steep slopes
    - Areas prone to flooding

    - Loss of developable area due to the requirement to provide mitigation measures for flooding and other natural hazards
- Redesignation/rezoning of industrial land for other uses, such as housing, retail, etc
- Acquisition of industrial land for road right-of ways or utility corridors
- Inclusion of non-industrial uses as permitted uses in industrial zones (e.g. large format retail and free standing offices) which reduces the supply of land for industrial uses

The supply of industrial land can also be increased by designating new lands for industrial uses and/or mitigating environmental and contamination constraints.

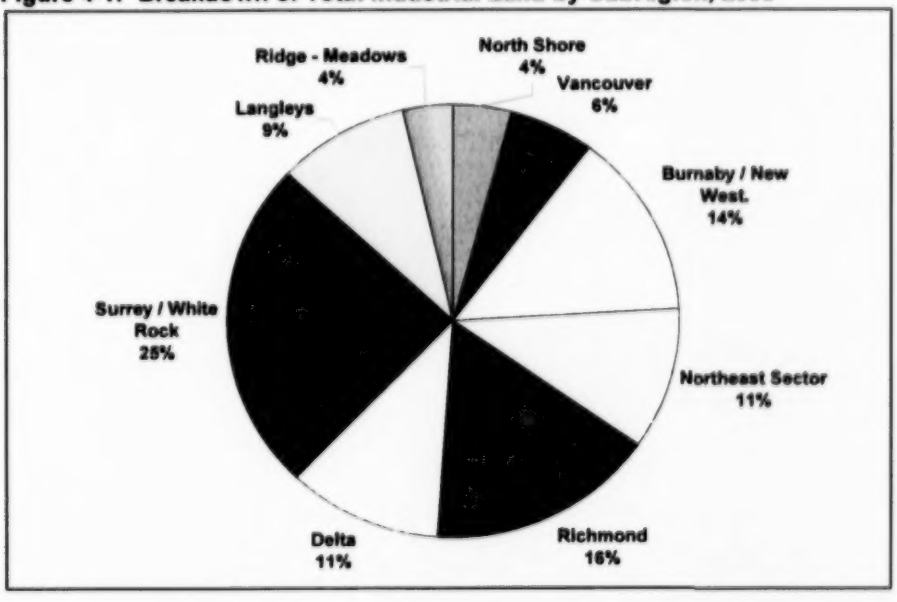
4 2005 Industrial Land Inventory

4.1 Total Industrial Land Supply

At June 2005, there were 26,089 acres (10,558 ha) of industrial land in Greater Vancouver. This includes land that is designated or zoned for industrial use. Of the 21 GVRD municipalities, 15 of the municipalities had a supply of industrial lands. The six municipalities without a supply of industrial lands are West Vancouver, Lions Bay, Bowen Island, Belcarra, Anmore, and White Rock. However, each of these municipalities is located in subregions that do have a significant supply of industrial land.

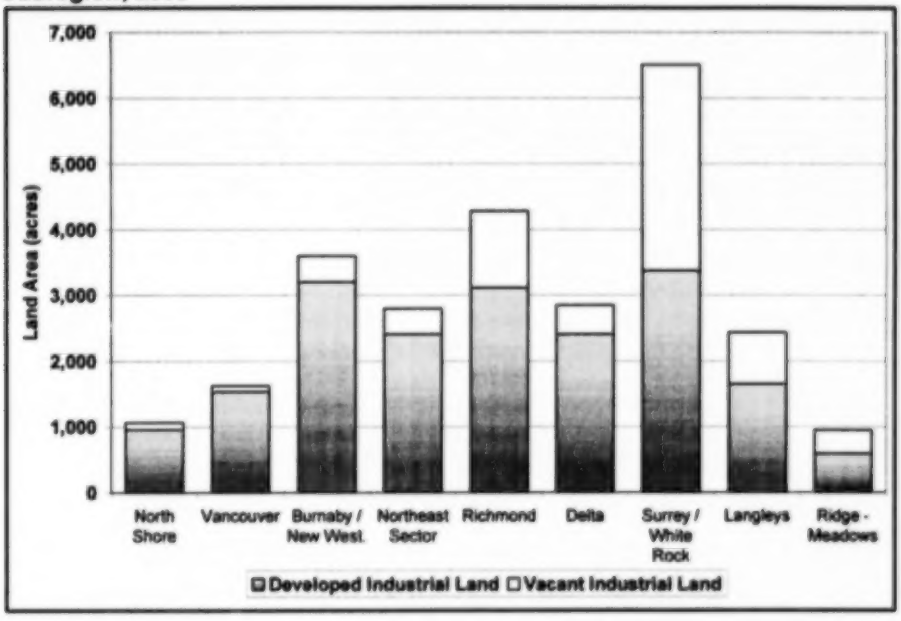
Figure 4-1 presents a breakdown of the industrial land supply by subregion. The Surrey-White Rock region comprises 25% of the region's industrial lands. Delta and Richmond comprise a further 27% of the region's industrial lands. Burnaby, New Westminster, and the Northeast Sector make up an additional 25% of the industrial lands. The remaining quarter consists of Vancouver (6%), the North Shore (4%), the Langleys (9%), and Ridge-Meadows (4%). Over 62% of the region's industrial land supply is located south of the Fraser River (including Richmond).

Figure 4-1: Breakdown of Total Industrial Land by Subregion, 2005



The industrial land supply is comprised of both developed and vacant industrial lands. In the GVRD, 74% of the industrial land base, or 19,230 acres (7,782 ha), had been developed as of 2005. The remaining 26% of the industrial land base, or 6,859 acres (2,775 ha), is vacant. Figure 4-2 shows the breakdown of the land supply by both developed and vacant land by subregion. A detailed municipal breakdown of the amount of developed and vacant industrial land is included as Appendix B.

Figure 4-2: Total Industrial Land by Developed and Vacant Land by Subregion, 2005

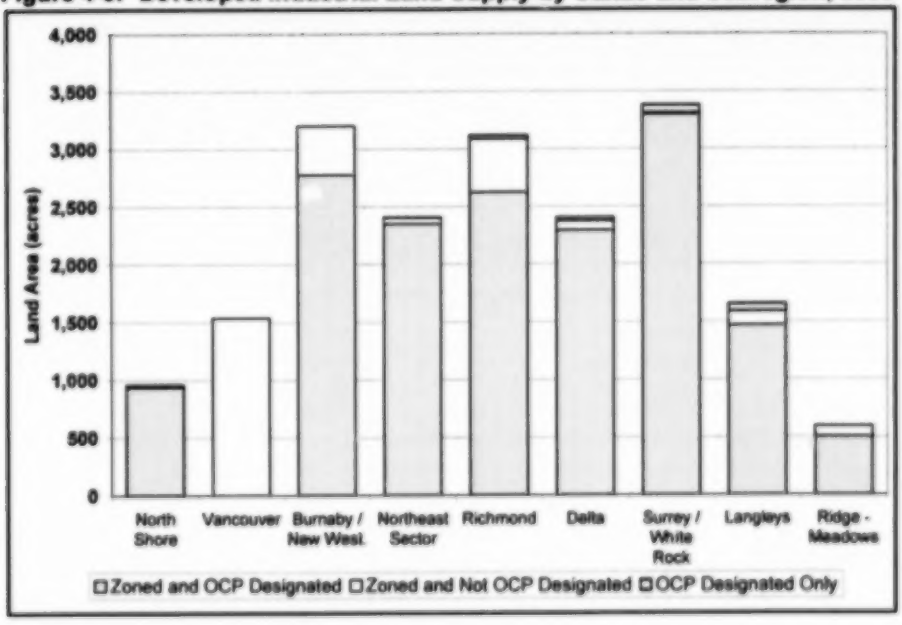


The following sections paint a more detailed picture of the developed and vacant industrial land. In addition, a discussion is included on the underutilization of developed industrial lands.

4.2 Developed Industrial Land

The developed industrial land consists of land that is either designated industrial and utilized by industry, or is zoned but not designated industrial and utilized by industry. In 2005, there were 19,230 acres (7,782 ha) of developed industrial lands in Greater Vancouver. Figure 4-3 shows the distribution of the developed industrial land supply by planning status and by subregion. The majority of the industrial land base (94%) is both designated in the municipality's official community plan and zoned for industrial use[3]. Some of the industrial land (5%) is zoned for industrial use but does not have a land use designation in the municipality's Official Community Plan (OCP), or designated for industrial in the OCP but not presently zoned for industrial. Zoned industrial land that is developed for industrial uses is included in the developed industrial land inventory.

Figure 4-3: Developed Industrial Land Supply by Status and Subregion, 2005



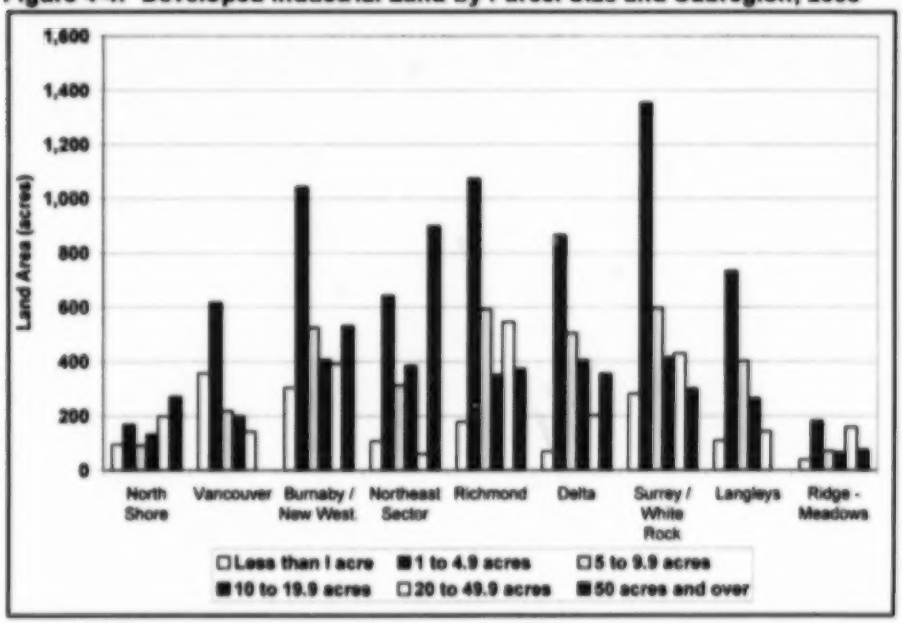
A small percentage (1%) of the developed land includes industrial designated properties that are zoned for permitted non-industrial uses (commercial, institutional).

[3] The City of Vancouver, Vancouver Port and Vancouver International Airport lands are not covered by an Official Community Plan but are included in the Zoned and OCP Designated status in the report.

Approximately 55% of the developed industrial lands are located south of the Fraser River. A significant amount of developed industrial land is also located in Burnaby / New Westminster and the Northeast Sector.

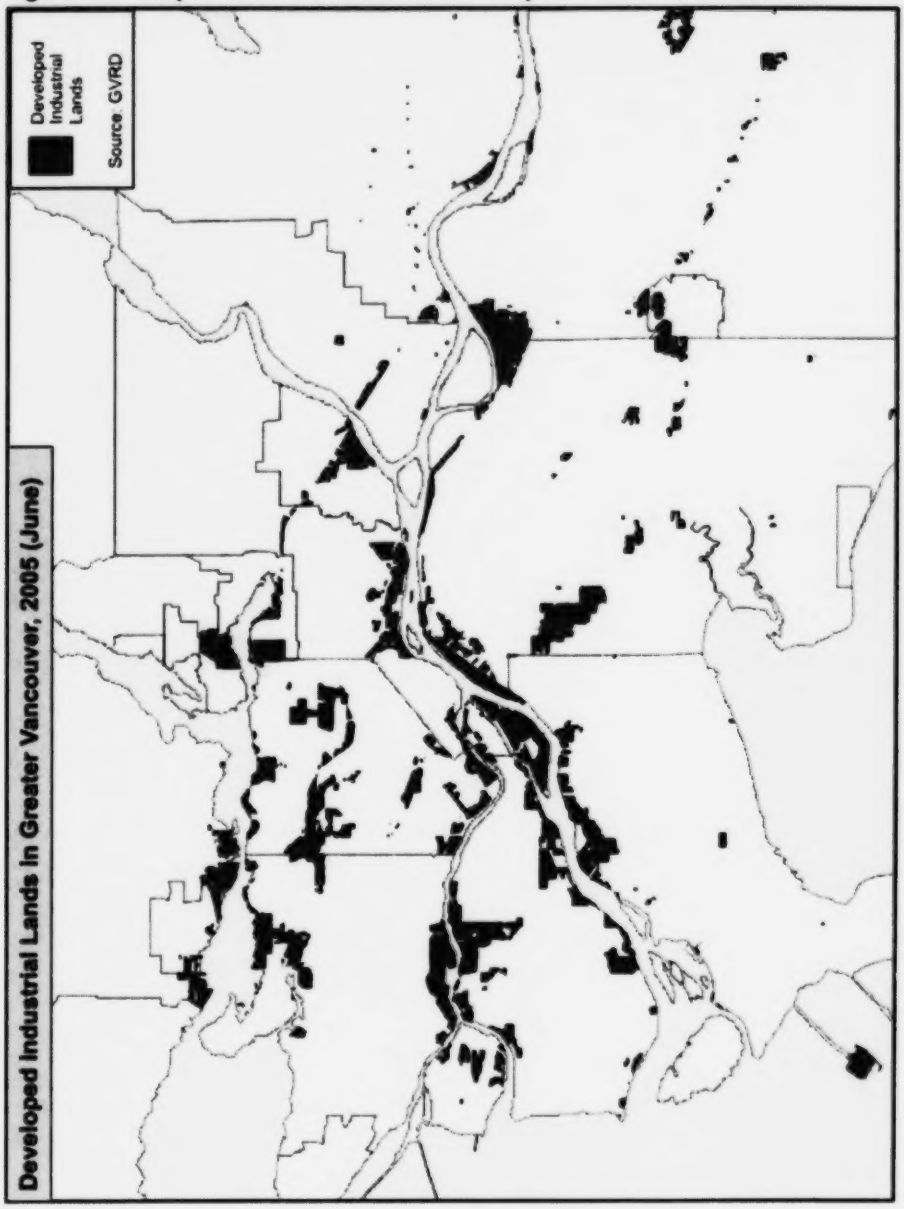
Figure 4-4 shows the breakdown of the developed industrial land by parcel size and by subregion. Approximately 43% of the developed industrial land parcels are less than 5 acres in size. In Vancouver, approximately 63% of the developed industrial lands are on small parcels that are less than 5 acres in size. On a proportional basis, the largest concentration of large developed industrial parcels are located on the North Shore, the Northeast Sector and in Ridge-Meadows. Approximately 49% of the industrial land in the North Shore occur on parcels greater than or equal to 20 acres in size. In both the Northeast Sector and Ridge-Meadows, 40% of the developed industrial lands occur on parcels greater than or equal to 20 acres. Burnaby/New Westminster and the Northeast Sector have the region's largest supply of developed parcels of 50 acres and over.

Figure 4-4: Developed Industrial Land by Parcel Size and Subregion, 2005



The location of the developed industrial lands is shown on the map in Figure 4-5

Figure 4-5: Map of the Distribution of Developed Industrial Land, 2005



4.3 Vacant Industrial Land Supply

There were approximately 6,859 acres (2,775 ha) of vacant industrial land at June 2005 in Greater Vancouver. Figure 4-6 shows the breakdown of the vacant industrial land by subregion. Over 80% of the vacant industrial land is located south of the Fraser River. Approximately 46% of the region's vacant industrial land is located in Surrey/White Rock. Richmond contains 17% of the vacant industrial land; the Langleys comprise 11% of the vacant land; and Delta comprises 7% of the vacant land. The largest portion of vacant land north of the Fraser River is located in Burnaby / New Westminster and the Northeast Sector, each which comprised 6% of Greater Vancouver's vacant industrial land in 2005. Ridge-Meadows contains 5% of the region's vacant industrial lands with the North Shore and Vancouver comprising only 2% and 1% of the region's vacant industrial lands respectively.

Figure 4-6: Breakdown of Vacant Industrial Land by Subregion, 2005

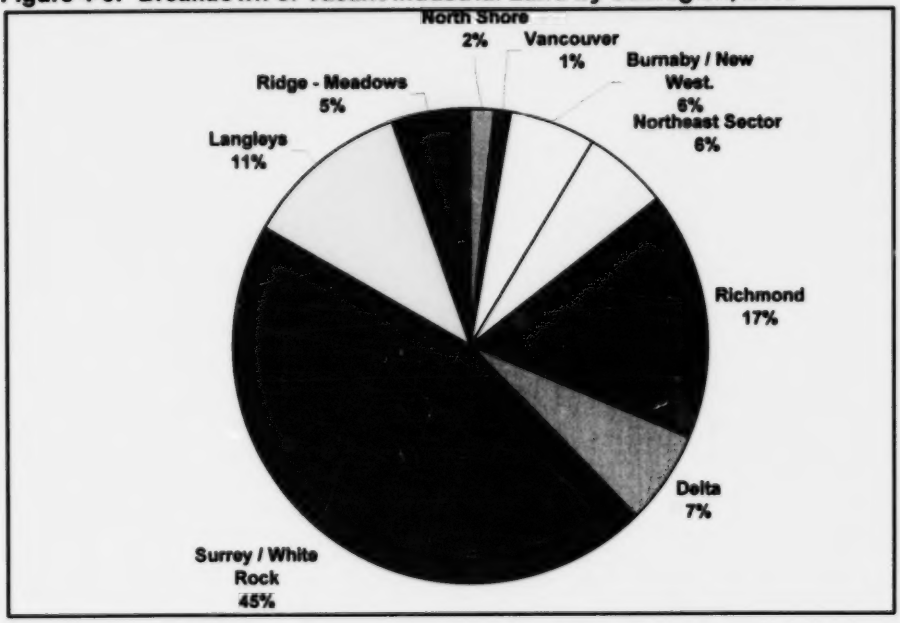
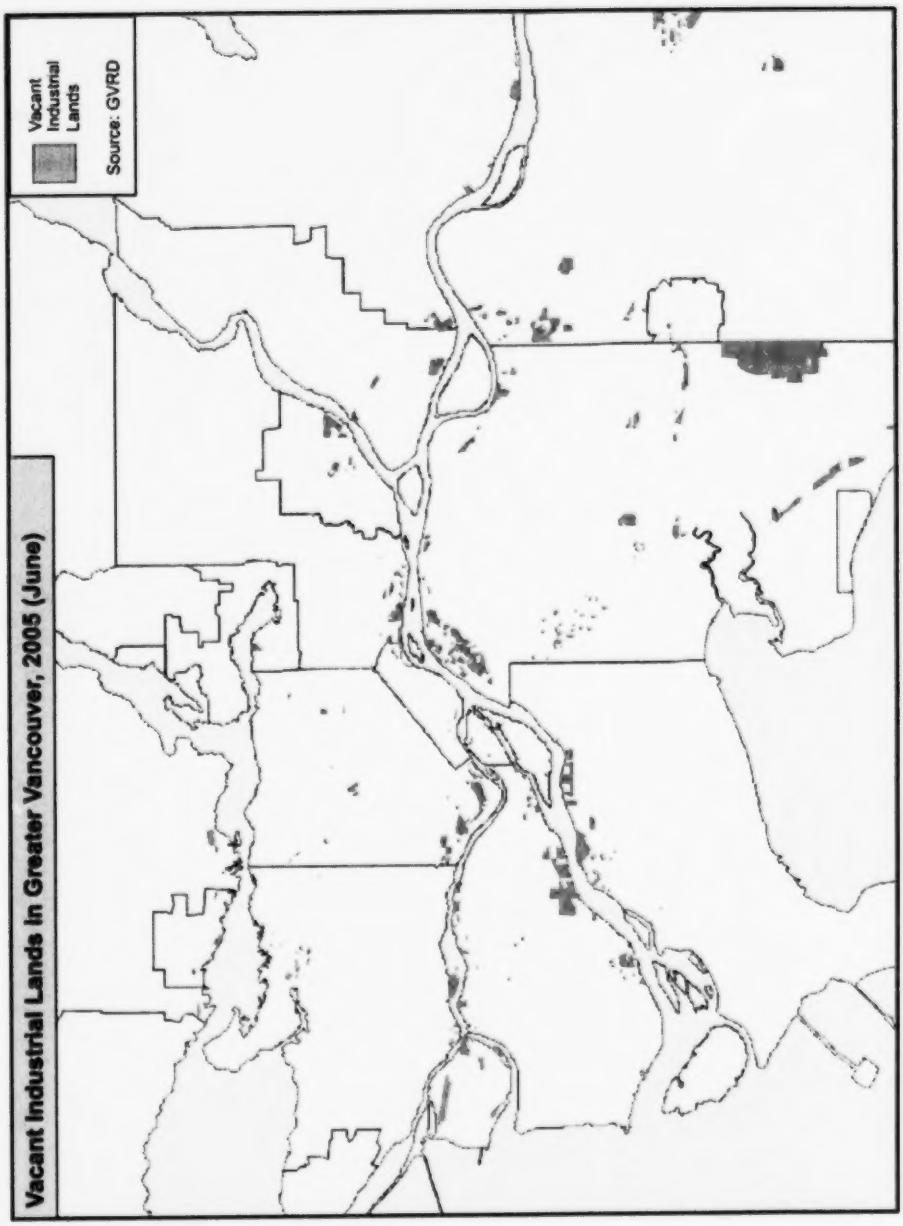


Figure 4-7 shows a map of the distribution of vacant industrial land in the region.

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Figure 4-7: Map of the Distribution of Vacant Industrial Land, 2005



The vacant industrial land includes properties that are OCP designated for industrial, and may either be zoned or not zoned for industrial uses. Figure 4-8 shows the breakdown of vacant industrial land by zoning status and subregion. Only 46% of the vacant industrial land is both OCP designated and zoned for industrial use. Approximately 45% of the land is designated but not zoned for industrial use. Industrial zoning is one potential indication of the readiness for vacant industrial land to come on-stream in the short-term. Other factors include the availability of servicing, location relative to already developed areas, and industrial land demand.

There is 260 acres of special status industrial land in Surrey. These areas have a industrial land use plan that has been approved by Surrey Council resolution; however, the OCP designation has not been amended and will proceed in conjunction with rezoning. Vancouver Port and the Vancouver International Airport lands are also considered under the special status designation.

Figure 4-8: Vacant Industrial Land Supply by Status and Subregion, 2005

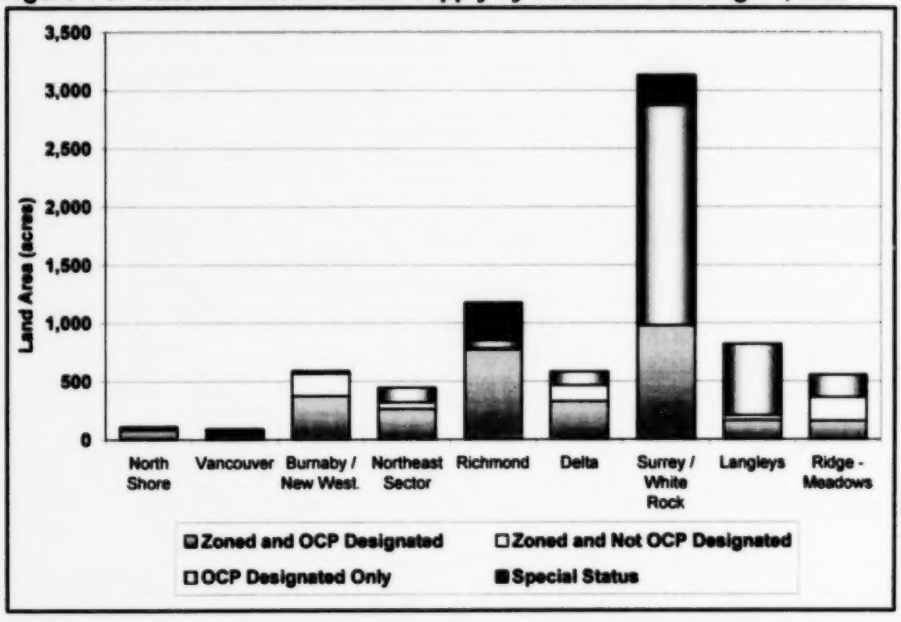


Table 4-1 provides the distribution of the region's vacant industrial land area by parcel size. While some vacant industrial land parcels represent a 'net' land area after road right-of-way dedication, a portion of the inventory has not had road dedication removed from the estimate of the land area. Further, the full land area of the vacant industrial land is not all available for development. Steep slopes, setbacks from streams and water bodies, environmental constraints or sensitive areas, and lands prone to natural hazards all reduce the amount of land that is potentially developable for industrial purposes.

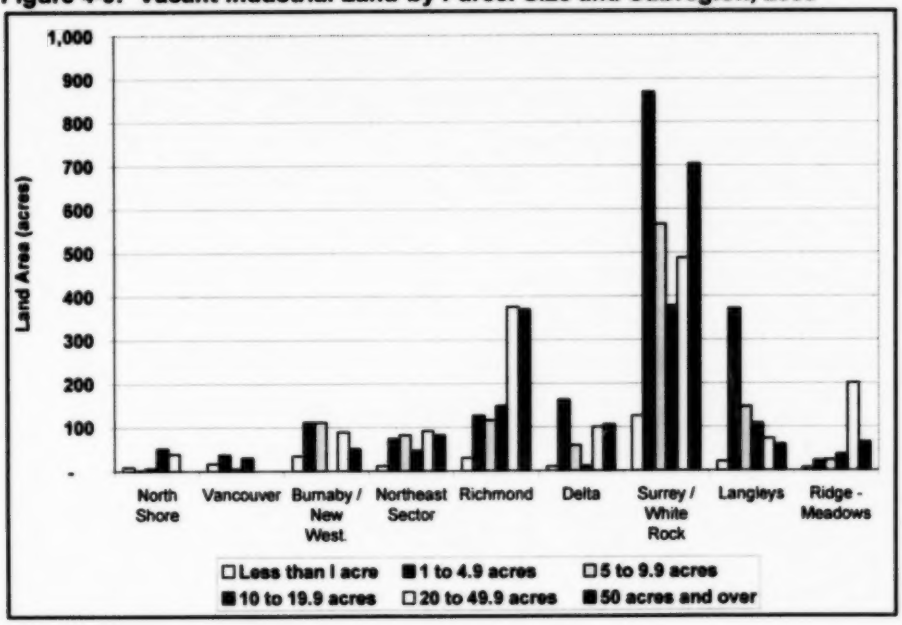
Surrey/White Rock also has the highest supply of industrial land for any size of industrial parcels of any of the subregions.

Table 4-1: Distribution of Greater Vancouver Vacant Industrial Land Area by Parcel Size by Subregion, 2005

Subregions	Less than 1 acre	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 49.9 acres	50 acres and over	Total Land Area
North Shore	9	2	7	51	39	-	107
Vancouver	17	37	5	30	-	-	89
Burnaby / New West.	35	111	111	-	89	51	396
Northeast Sector	12	74	82	47	92	83	389
Richmond	30	126	116	149	376	370	1,167
Delta	10	162	58	11	101	105	447
Surrey / White Rock	126	869	566	377	488	704	3,129
Langleys	21	371	147	108	73	60	779
Ridge - Meadows	7	23	24	37	201	65	356
Greater Vancouver	265	1,775	1,116	810	1,457	1,437	6,859

Figure 4-9 show the breakdown of vacant industrial land by parcel size and subregion. It shows that approximately 42% of the vacant industrial land is on parcels that are 20 acres and greater in size. Roughly two-thirds of the large vacant industrial parcels greater than or equal to 20 acres in size are located in Surrey/White Rock and Richmond. Surrey/White Rock and the Langleys have a relatively large supply of parcels that are less than 5 acres.

Figure 4-9: Vacant Industrial Land by Parcel Size and Subregion, 2005



4.4 Market Readiness of Vacant Industrial Lands

To further assess the development availability of the vacant industrial lands, a task sub-group was formed in June 2005 to classify the market readiness of vacant land. Subsequently, in mid 2005, municipal staff was asked to review their vacant industrial land and estimate an appropriate "market ready" status for each property based on a general assessment of the potential availability and timing of infrastructure services (water, sewer, drainage and roads) for the site. The following market readiness categories were devised:

1. Short-Term Market Ready vacant industrial lands could likely be available within 1 year. These sites may require any combination of rezoning, subdivision and servicing agreement, a Development Permit or a Building Permit before proceeding to the construction stage.

2. Medium-Term - vacant industrial lands that are anticipated to be available between 2 and 10 years. These sites may also require any combination of rezoning, subdivision and servicing agreement, a Development Permit or a Building Permit before proceeding to the construction stage.

3. Long-Term - vacant industrial lands that are not likely to be serviced within 10 years.

Large-scale hard copy maps depicting vacant industrial parcels were distributed to the municipalities in July 2005. Municipal staff reviewed their vacant industrial land parcels and identified the appropriate "market ready" status for each property. This feedback was incorporated into the industrial land database

Table 4-2 illustrates the various stages of market readiness for vacant industrial lands across Greater Vancouver subregions. Overall, roughly 35% of the region's vacant land supply (2,402 acres) is market ready now or could be within the next year. An additional 36% of the vacant inventory (2,499 acres) is anticipated to be made available after one year but within a ten-year horizon, and the 30% balance of the vacant inventory are not likely to come on stream for at least another decade.

In terms of geographic distribution, the vast majority of the region's vacant industrial land supply for all three categories of market readiness is located south of the Fraser River. Municipalities located north of the Fraser River only account for 25% of the vacant industrial lands available in the short and medium term horizons. After 2015, a mere 5% of the region's vacant industrial inventory could be available in jurisdictions lying north of the Fraser River. Indeed, a decade from now, virtually all (87%) of the region's vacant industrial land supply is likely to will be in Surrey.

The region's federal port-related lands (Vancouver International Airport, Vancouver Port Authority, Fraser River Port Authority, North Fraser Port Authority) account for 700 acres of Greater Vancouver's vacant industrial lands, or roughly 10% of the vacant inventory. Approximately 60% (445 acres) of the federal lands are deemed to be market ready in status. An additional 210 acres (30%) of the vacant

industrial inventory under federal jurisdiction could be available over the medium term, with the remaining 10% (45 acres) coming on stream a decade from now.

Table 4-2: Status of "Market Ready" Vacant Land by Subregion, 2005

Subregions	Market Ready	Medium-Term	Long-Term	Total
North Shore	29	60	18	107
Vancouver	89	-	-	89
Burnaby / New Wesminster	185	211	-	396
Northeast Sector	237	152	-	389
Richmond	929	207	31	1,167
Delta	25	411	11	447
Surrey / White Rock	487	932	1,710	3,129
Langleys	348	331	100	779
Ridge - Meadows	71	196	88	356
Greater Vancouver	**2,402**	**2,499**	**1,958**	**(1) 6,859**

Notes:

Market Ready - vacant industrial lands that could be ready today or before August 2006. These lands may require a Development Permit or Building Permit to proceed to the development stage.

Medium-Term - vacant industrial lands that are anticipated to be available after August 2006 but before August 2015. These lands may or may not be presently serviced -- but are expected to be serviced within the next 10 years under a municipality's capital services plan.

Long-Term - vacant industrial lands that are not likely to be serviced until after August 2015.

(1) Approximately 700 acres of designated vacant industrial lands are located on properties under federal jurisdiction (Vancouver International Airport, Vancouver Port Authority, Fraser River Port Authority, North Fraser Port Authority).

Market Readiness estimates do not include an assessment of all potential constraints on development. Properties included as market ready based on servicing accessibility may require rezoning or other development approvals, or be hindered by factors such as location, current uses, accessibility, lot assembly, soil conditions, need for pre-loading, high development costs or other factors.

4.5 Underutilized Industrial Lands

As the region grows and develops, future industrial development will primarily locate on vacant industrial land or use existing developed industrial land more efficiently. The underutilization of industrial land supply was researched by the GVRD. A number of methodologies for identifying underutilized lands were researched from other jurisdictions including Seattle and Portland. The variables used by these jurisdictions are summarized in Chart 4-1.

Chart 4-1: Methods Used by Other Jurisdictions to Estimate Underutilization of Industrial Lands

Type	Variables	Source
Improvements as a Proportion of Total Property Assessment	• Improvements less than or equal to 25% of total property assessment	Puget Sound Industrial Supply Study
Hybrid (Improvements Values and Floor Space Areas)	• Floor space area less than or equal to 10% of land area • Improvements less than or equal to $5 per square foot	Metro Portland Industrial Land Supply Study

Two of the most common parameters for estimating underutilization of industrial land are using a ratio of improvements to the total property assessment and to use a floor space area ratio of buildings to the site area. The following are some of the criteria that were used in these studies:

Improvements Less than or Equal to 25% of Total Property Assessment – Redevelopment is assumed to occur when the ratio of improvements value and total property assessment (improvements + land) is equal to or less than 25%. This methodology was used in the Puget Sound Industrial Land Supply study.

Floor Space Area Less than or Equal to 10% of Land Area – Redevelopment is assumed to occur when the ratio of improvements square footage and land area square footage is equal to or less than 10%. This methodology was used in the Metro Portland Industrial Land Supply study.

Improvements Less than or Equal to $5 per Square Foot – Redevelopment is assumed to occur when the ratio of improvements value and improvements square footage is equal to or less than $5 per square foot. This methodology was used in the Metro Portland Industrial Land Supply study.

The GVRD applied these methodologies to the GVRD Industrial Lands Inventory by combining the spatial database with the assessment data from the BC Assessment Authority. However, only 65% of the inventory records had a complete data set. Therefore, additional data is required before the methodology can be fully applied to estimate underutilized industrial lands in Greater Vancouver.

There are a number of technical issues associated with applying the methodologies on a region-wide basis. The identification of underutilized industrial lands requires a site-by-site analysis.

For the purpose of illustration, Table 4-3 contains an estimation of the region's underutilized lands using the ratio of improvements square footage and land area square footage approach. Under this methodology, potential industrial land redevelopment was assumed to occur on industrial parcels where the ratio of building improvements square footage and land area square footage is equal to or less than 10%.

Table 4-3: Sample Results of Greater Vancouver's Estimated Underutilized Industrial Lands Using Floor Space Less Than or Equal to 10% of Land Area by Subregion, 2005

Subregions	Floor Space Area Less than or Equal to 10% of Land Area (acres)	Regional Share
North Shore	35	1%
Vancouver	105	3%
Burnaby / New Wesminster	561	14%
Northeast Sector	330	8%
Richmond	341	9%
Delta	150	4%
Surrey / White Rock	1,599	41%
Langleys	559	14%
Ridge - Meadows	252	6%
Total	**3,932**	**100%**

Table Notes: Above results are based on a query of the 2005 Greater Vancouver Industrial Land Inventory and their associated British Columbia Assessment Authority (BCAA) records. Only 65% of the Inventory records provided data for Table 4-2. Therefore, 35% of the Inventory records are NOT reflected in the above underutilization estimate.

This methodology estimates that approximately 3,900 acres (or roughly 20% of the developed industrial land inventory) could be deemed as underutilized across Greater Vancouver. It suggests that nearly 40% of the region's underutilized lands fall within the City of Surrey, with an additional 15% falling within each of the Burnaby/New Westminster and Langley subregions. While the presence of underutilized lands does not increase the overall regional supply of industrial lands, the potential for redevelopment does provide for the opportunity of new industrial land development at densities higher than those currently existing today.

4.6 Comparison with 1996 Industrial Lands Inventory

As the methodologies for previous industrial land inventories in Greater Vancouver, such as the one in 1996, were different and less comprehensive than the current inventory, it is not possible to conduct a definitive comparative and trends analysis. A general discussion is presented below. The reader should consider the numbers from the 1996 study and earlier as an order of magnitude comparison.

As shown in Table 4-4, the industrial land supply in 1996 was estimated at 29,914 acres (12,110 ha). In 2005, the industrial land supply was estimated at 26,089 acres (10,558 ha).

Table 4-4: Order of Magnitude Comparison of 1996 and 2005 Industrial Lands Inventories

Amount of Industrial Land (acres)	1996	2005
Developed Industrial land	18,508	19,230
Vacant Industrial Land	11,407	6,859
TOTAL Industrial Land	**29,914**	**26,089**

** Note: Due to the different methodologies for completing the inventories, the two data sets should not be compared quantitatively – only at an order of magnitude level*

In 1996, the developed industrial land supply was estimated at 18,508 acres (7,490 ha). In 1981, there were 11,159 acres (4,515 ha) of developed industrial land in the region (current GVRD boundaries). In 2005, the developed industrial land supply is estimated at 19,230 acres (7,782 ha).

In 1996, there were 11,407 acres (4,615 ha) of vacant industrial land in the GVRD. In 2005, the current Industrial Lands Inventory indicates that there are 6,859 acres (2,775 ha) of vacant industrial lands.

While we cannot specify the exact amount of industrial land that has been developed due to different methodologies, it appears that there has been a significant reduction in the vacant industrial land supply since 1996. The 2005 data provides a detailed parcel baseline from which future changes can now be measured.

4.7 Adequacy of Existing Industrial Land Supply to Meet Future Demand

The purpose of this study was to profile the supply of industrial land in the region, and does not include a detailed industrial lands demand and development forecast. However, a very general 'theoretical' estimate of the number of years of potential supply can be made using historical demand and absorption rates. Historic trends and input from the brokerage industry have generally suggested that historic rates of industrial land absorption would be between 320 to 400 acres per year. Other studies have ranged from 300 acres to 500 acres, although the lower end of this range is considered most likely.

A sensitivity analysis was prepared assuming three different industrial land absorption rates: 300, 400, and 500 acres per year, and that the total amount of vacant land would be available for development. The results of these assumptions are shown in Table 4-5. Under the absorption rate of 300 acres/year, all the vacant land would be absorbed by 2028. Under an absorption rate of 400 acres/year, the supply of vacant industrial land would be depleted shortly after 2022. Finally, if the remaining vacant industrial lands were absorbed at a rate of 500 acres/year, the supply of vacant industrial land would be depleted before 2019.

Table 4-5: Potential Depletion Timeline for Vacant Industrial Land Supply Under Alternative Demand/Absorption Rate Scenarios

Annual Absorption Rate (acres)	Land at End of Period (acres)		Year Supply Depleted
	2011	2021	
300	5,100	2,100	2028
400	4,500	500	2022
500	3,900	-	2019

However, there are a complex set of factors that can affect the industrial land supply and absorption rates.

Task Group members from municipalities and the development industry stress that the development potential of a significant portion of the vacant lands will be hindered by factors such as location, current uses, accessibility, lot assembly, soil conditions, need for pre-loading or high development costs. This study does not include a detailed assessment of potential development constraints, but cautions that such constraints could significantly affect the availability and development potential of the vacant industrial land supply.

Land absorption rates will also be affected by the development of under-utilized properties within developed industrial areas (not included in Table 4-5), and the overall vacancy rate of existing industrial buildings.

Recent work by Cushman & Wakefield LePage has shown that, while the number of acres of designated industrial land has been reduced considerably over the last 10 years, more floorspace has been added on the industrial land base. For example, Cushman & Wakefield LePage estimate that 17 million square feet of floorspace was added, bringing the total inventory of industrial floorspace to 162,000,000 square feet.

With a variable range of absorption rates and taking into consideration potential development constraints, it is estimated that the supply of industrial land could theoretically accommodate regional development demand for the next 10 to 15 years.

5. Conclusions

The report provides a profile of Greater Vancouver's industrial land supply as of mid-year 2005. Utilizing a GIS property database, this inventory can be used as a baseline to monitor future absorption and changes in the land supply and characteristics.

In 2005, there were 26,089 acres (10,558 ha) of industrial land in Greater Vancouver. Approximately 74% of the industrial land, or 19,230 acres (7,782 ha), is developed. The remaining 26% of industrial land supply, or 6,859 acres (2,775 ha), is vacant (not utilized for industrial purposes).

Over 62% of the region's total industrial land supply is located south of the Fraser River (including Richmond). Of the vacant industrial land, over 80% is located south of the Fraser River, with 11% located in the Northeast sector and Ridge-Meadows subregions. The City of Surrey alone contains 46% of the region's vacant industrial land supply.

A market readiness assessment of the availability of infrastructure services estimates that about one third of the vacant industrial land supply is available for development within the short term (within approximately 1 year), one third would be available in the medium term (2 – 10 years), and one third over the longer term (>10 years).

Task Group members from the development industry and municipalities stress that the development potential of a significant portion of the vacant lands will be hindered by factors such as location, current uses, accessibility, lot assembly, soil conditions, need for pre-loading or high development costs. This study does not include a detailed assessment of potential development constraints, but cautions that such constraints could affect the availability and development potential of the vacant industrial land supply.

Based on a range of preliminary demand estimates using historical land absorption rates and taking into consideration potential development constraints, the supply of industrial land could theoretically accommodate regional development demand for the next 10 to 15 years.

Industrial land is needed in all subregions to provide for city-serving activities, a diversity of jobs, proximity to the labour force for commuting, and efficient use of goods movement infrastructure, including road, rail, and barge. It will be important for inner and middle ring municipalities to stabilize their existing industrial land base and to find ways to use existing industrial lands more intensively.

This report recommends the following actions to enhance regional policy analysis:

1. Update the Industrial Lands Inventory on a regular basis and make data available on-line.
2. Conduct additional research on:
   a. Policies to stabilize and preserve the region's industrial land base.

b. Identifying underutilized industrial lands and assessing factors promoting or impeding the redevelopment of utilized sites;
c. The long term demand for industrial land;
d. Implications for the transportation systems, links to ports and airport, intra-regional and inter-regional markets, and labour force access.

6 References

Greater Vancouver Regional District. July 1997. "An Analysis of the Regional Industrial Land Supply in Greater Vancouver in 1996."

Greater Vancouver Regional District. 2001 Land Use Map.

Otak Inc. in Association with ECONorthwest Parametrix. October 2001. "Phase 3: Regional Industrial Land Study for the Portland-Vancouver Metropolitan Area."

Puget Sound Regional Council and the University of Washington Center for Community Development and Real Estate. February 1998. "Industrial Land Supply and Demand in the Central Puget Sound Region".

Appendix A: Greater Vancouver Industrial Lands Task Group Members

Chair: Richard White, Director of Planning, City of North Vancouver

GVRD Staff: Michael Coombs, Programmer/Analyst, Corporate Services
Bob Denboer, Planning Analyst, Policy & Planning Dept.
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Task Group Members:

Name:	Position:	Organization:
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Suzanne Carter-Huffman	Senior Planner	City of Richmond
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Bill Corsan	Planner	Vancouver Port Authority
Captain Tom Corsie	Vice President, Property Development	Fraser River Port Authority
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Allen Domaas	President and CEO	Fraser River Port Authority
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Stuart Jones	Planner	City of Richmond
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Erica Tiffany	Planner	City of Coquitlam
Michael Track	Project Manager, FAST TRACK	Government of British Columbia
Richard Wozny	Vice President and Manager	Cushman & Wakefield LePage

Appendix B: Municipal Summary

Table B 1: Total Industrial Land Supply by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Developed Industrial Land (Acres)	Vacant Industrial Land (Acres)	Total Industrial Land (Acres)	Regional Share
Burnaby	2,800	368	3,168	12.1%
New West	398	28	427	1.6%
Burnaby / New West. Subtotal	***3,198***	***396***	***3,595***	***13.8%***
Delta	2,402	447	2,849	10.9%
Delta Subtotal	***2,402***	***447***	***2,849***	***10.9%***
Langley City	212	7	218	0.8%
Langley Township	1,439	772	2,211	8.5%
Langleys Subtotal	***1,651***	***779***	***2,430***	***9.3%***
North Vancouver City	376	33	409	1.6%
North Vancouver District	581	74	655	2.5%
North Shore Subtotal	***957***	***107***	***1,064***	***4.1%***
Coquitlam	754	169	923	3.5%
Port Coquitlam	540	190	729	2.8%
Port Moody	1,114	30	1,144	4.4%
Northeast Sector Subtotal	***2,407***	***389***	***2,797***	***10.7%***
Richmond	3,114	1,167	4,280	16.4%
Richmond Subtotal	***3,114***	***1,167***	***4,280***	***16.4%***
Maple Ridge	357	207	564	2.2%
Pitt Meadows	234	149	383	1.5%
Ridge - Meadows Subtotal	***591***	***356***	***947***	***3.6%***
Surrey	3,376	3,129	6,506	24.9%
Surrey / White Rock Subtotal	***3,376***	***3,129***	***6,506***	***24.9%***
Vancouver	1,533	89	1,623	6.2%
Vancouver Subtotal	***1,533***	***89***	***1,623***	***6.2%***
Greater Vancouver	**19,230**	**6,859**	**26,089**	**100.0%**

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Table B 2: Developed Industrial Land by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Zoned and OCP Designated	Zoned and Not OCP Designated	OCP Designated Only	Total Developed Industrial
Burnaby	2,400	398	2	2,800
New West	372	26	-	398
Burnaby / New West. Subtotal	***2,773***	***424***	***2***	***3,198***
Delta	2,291	82	29	2,402
Delta Subtotal	***2,291***	***82***	***29***	***2,402***
Langley City	172	39	0	212
Langley Township	1,292	81	66	1,439
Langleys Subtotal	***1,464***	***120***	***67***	***1,651***
North Vancouver City	361	15	-	376
North Vancouver District	575	5	-	581
North Shore Subtotal	***936***	***21***	***-***	***957***
Coquitlam	732	16	6	754
Port Coquitlam	513	27	-	540
Port Moody	1,101	13	-	1,114
Northeast Sector Subtotal	***2,346***	***56***	***6***	***2,407***
Richmond	2,623	462	29	3,114
Richmond Subtotal	***2,623***	***462***	***29***	***3,114***
Maple Ridge	318	39	-	357
Pitt Meadows	183	51	-	234
Ridge - Meadows Subtotal	***501***	***91***	***-***	***591***
Surrey	3,296	8	72	3,376
Surrey / White Rock Subtotal	***3,296***	***8***	***72***	***3,376***
Vancouver	-	1,533	-	1,533
Vancouver Subtotal	***-***	***1,533***	***-***	***1,533***
Greater Vancouver	**16,228**	**2,796**	**205**	**19,230**

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Table B 3: Vacant Industrial Land by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Zoned and OCP Desiganted	OCP Desiganted Only	Special Status	Total Vacant Industrial	Zoned and Not OCP Desiganted
Burnaby	347	21	-	368	170
New West	28	1	-	28	22
Burnaby / New West. Subtotal	***374***	***22***	***-***	***396***	***192***
Delta	329	118	-	447	134
Delta Subtotal	***329***	***118***	***-***	***447***	***134***
Langley City	-	7	-	7	-
Langley Township	165	607	-	772	40
Langleys Subtotal	***165***	***614***	***-***	***779***	***40***
North Vancouver City	27	7	-	33	-
North Vancouver District	56	18	-	74	4
North Shore Subtotal	***83***	***25***	***-***	***107***	***4***
Coquitlam	168	1	-	169	42
Port Coquitlam	63	127	-	190	13
Port Moody	30	-	-	30	-
Northeast Sector Subtotal	***262***	***128***	***-***	***389***	***56***
Richmond	772	71	324	1,166	9
Richmond Subtotal	***772***	***71***	***324***	***1,166***	***9***
Maple Ridge	48	159	-	207	190
Pitt Meadows	113	36	-	149	9
Ridge - Meadows Subtotal	***161***	***194***	***-***	***356***	***200***
Surrey	980	1,890	260	3,129	-
Surrey / White Rock Subtotal	***980***	***1,890***	***260***	***3,129***	***-***
Vancouver	-	-	89	89	0
Vancouver Subtotal	***-***	***-***	***89***	***89***	***0***
Greater Vancouver	**3,125**	**3,061**	**673**	**6,859**	**635**

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Table B 4: Parcel Size of Developed Industrial Land by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Less than 1 acre	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 49.9 acres	50 acres and over	Total Land Area
Burnaby	280	933	443	333	281	530	2,800
New West	23	110	82	73	110	-	398
Burnaby / New West. Subtotal	***303***	***1,043***	***525***	***406***	***390***	***530***	***3,198***
Delta	70	865	505	405	202	355	2,402
Delta Subtotal	***70***	***865***	***505***	***405***	***202***	***355***	***2,402***
Langley City	28	126	58	-	-	-	212
Langley Township	81	607	345	263	143	-	1,439
Langleys Subtotal	***110***	***733***	***402***	***263***	***143***	***-***	***1,651***
North Vancouver City	26	75	11	77	-	187	376
North Vancouver District	69	93	81	56	198	83	581
North Shore Subtotal	***95***	***168***	***92***	***133***	***198***	***270***	***957***
Coquitlam	24	413	126	101	27	62	754
Port Coquitlam	59	187	155	139	-	-	540
Port Moody	25	42	32	145	34	836	1,114
Northeast Sector Subtotal	***108***	***643***	***314***	***385***	***61***	***898***	***2,407***
Richmond	179	1,073	593	350	545	374	3,114
Richmond Subtotal	***179***	***1,073***	***593***	***350***	***545***	***374***	***3,114***
Maple Ridge	38	170	55	66	28	-	357
Pitt Meadows	1	11	15	-	130	77	234
Ridge - Meadows Subtotal	***39***	***181***	***71***	***66***	***158***	***77***	***591***
Surrey	282	1,353	596	415	430	301	3,376
Surrey / White Rock Subtotal	***282***	***1,353***	***596***	***415***	***430***	***301***	***3,376***
Vancouver	357	616	218	200	142	-	1,533
Vancouver Subtotal	***357***	***616***	***218***	***200***	***142***	***-***	***1,533***
Greater Vancouver	***1,542***	***6,676***	***3,315***	***2,622***	***2,270***	***2,804***	***19,230***

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Table B 5: Parcel Size of Vacant Industrial Land by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Less than 1 acre	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 49.9 acres	50 acres and over	TOTAL Land Area
Burnaby	25	99	104	-	89	51	368
New West	9	12	7	-	-	-	28
Burnaby / New West. Subtotal	***35***	***111***	***111***	***-***	***89***	***51***	***396***
Delta	10	162	58	11	101	105	447
Delta Subtotal	***10***	***162***	***58***	***11***	***101***	***105***	***447***
Langley City	7	-	-	-	-	-	7
Langley Township	14	371	147	108	73	60	772
Langleys Subtotal	***21***	***371***	***147***	***108***	***73***	***60***	***779***
North Vancouver City	6	2	7	19	-	-	33
North Vancouver District	3	-	-	33	39	-	74
North Shore Subtotal	***9***	***2***	***7***	***51***	***39***	***-***	***107***
Coquitlam	1	47	16	23	-	83	169
Port Coquitlam	8	27	67	24	64	-	190
Port Moody	3	-	-	-	28	-	30
Northeast Sector Subtotal	***12***	***74***	***82***	***47***	***92***	***83***	***389***
Richmond	30	126	116	149	376	370	1,167
Richmond Subtotal	***30***	***126***	***116***	***149***	***376***	***370***	***1,167***
Maple Ridge	7	23	5	37	135	-	207
Pitt Meadows	-	-	19	-	65	65	149
Ridge - Meadows Subtotal	***7***	***23***	***24***	***37***	***201***	***65***	***356***
Surrey	126	869	566	377	488	704	3,129
Surrey / White Rock Subtotal	***126***	***869***	***566***	***377***	***488***	***704***	***3,129***
Vancouver	17	37	5	30	-	-	89
Vancouver Subtotal	***17***	***37***	***5***	***30***	***-***	***-***	***89***
Greater Vancouver	**265**	**1,775**	**1,116**	**810**	**1,457**	**1,437**	**6,859**

Note: The term vacant includes lands planned for future industrial use, but not currently utilized for industrial activity. This may include residential and other non-industrial uses, as well as environmental and other constraints on development.

Table B 6: Status of "Market Ready" Vacant Industrial Land by Subregion and Municipality, 2005 (June)

Municipality / Subregion	Market Ready	Medium-Term	Long -Term	Total
Burnaby	157	211	0	-
New West	28	0	0	-
Burnaby / New West. Subtotal	***185***	***211***	***-***	***396***
Delta	25	411	11	447
Delta Subtotal	***25***	***411***	***11***	***447***
Langley City	7	0	0	7
Langley Township	341	331	100	772
Langleys Subtotal	***348***	***331***	***100***	***779***
North Vancouver City	27	7	0	33
North Vancouver District	3	53	18	74
North Shore Subtotal	***29***	***60***	***18***	***107***
Coquitlam	169	0	0	169
Port Coquitlam	65	125	0	190
Port Moody	3	28	0	30
Northeast Sector Subtotal	***237***	***152***	***-***	***389***
Richmond	929	207	31	1,167
Richmond Subtotal	***929***	***207***	***31***	***1,167***
Maple Ridge	33	95	79	207
Pitt Meadows	39	101	10	149
Ridge - Meadows Subtotal	***71***	***196***	***88***	***356***
Surrey	487	932	1,710	3,129
Surrey / White Rock Subtotal	***487***	***932***	***1,710***	***3,129***
Vancouver	89	-	-	89
Vancouver Subtotal	***89***	***-***	***-***	***89***
Greater Vancouver	**2,402**	**2,499**	**1,958**	**6,859**

Notes:

Market Ready - vacant industrial lands that could be ready today or before August 2006. These lands may require a Development Permit or Building Permit to proceed to the development stage.

Medium-Term - vacant industrial lands that are anticipated to be available after August 2006 but before August 2015. These lands may or may not be presently serviced -- but are expected to be serviced within the next 10 years under your municipality's ca

Long-Term - vacant industrial lands that are not likely to be serviced until after August 2015.

Market Readiness estimates do not include an assessment of all potential constraints on development. Properties included as market ready based on servicing accessibility may require rezoning or other development approvals, or be hindered by factors such as location, current uses, accessibility, lot assembly, soil conditions, need for pre-loading, high development costs or other factors.

Appendix C: Summary of Major Industrial Areas

Table C 1: Major Industrial Areas Profile, 2005 (June)

Industrial Area	Location	Vacant Land Area (acres) (June 2005)	Developed Land Area (acres) (June 2005)	Median Land Value[1]	Average Land Value[2] (per acre)	Median Building Value[3]	Median Building Size (sq.ft.)[4]	Median Building Age (year built)[5]
1. Norgate	North Vancouver	25	317	$505,000	$714,410	$225,000	9,934	1975
2. Lynnmour/Maplewood	North Vancouver	86	634	$289,000	$911,054	$246,000	6,652	1974
3. Burrard/Waterfront	Vancouver	13	327	$1,686,000	$1,101,145	$412,000	39,235	1973
4. Powell Street	Vancouver	1	83	$248,000	$2,038,113	$121,000	7,536	1964
5. Clark Drive	Vancouver	3	110	$290,000	$2,085,586	$114,000	6,560	1963
6. False Creek Flats	Vancouver	51	182	$864,000	$933,328	$267,000	19,266	1969
7. Mount Pleasant	Vancouver	1	83	$422,000	$3,970,525	$129,000	7,080	1966
8. Grandview/Boundary	Vancouver	1	198	$1,675,000	$1,040,542	$799,000	30,189	1974
9. South Vancouver	Vancouver	20	517	$787,000	$885,662	$298,000	15,530	1975
10. YVR	Richmond	324	407	n/a	n/a	n/a	n/a	n/a
11. Brighouse/Van Horne	Richmond	39	270	$280,000	$606,172	$194,000	9,800	1975
12. Mitchell Island	Richmond	78	209	$261,000	$258,592	$178,000	7,375	1990
13. Bridgeport/Creekwood	Richmond	97	897	$629,000	$489,511	$502,000	45,739	1979
14. Fraser Port/Fraserwood	Richmond	543	845	$999,000	$183,878	$1,262,000	27,808	1998
15. Queensborough	New Westminster	9	172	$347,000	$213,031	$53,200	2,946	1973
16. Tilbury	Delta	264	704	$489,000	$232,989	$726,000	20,000	1990
17. Nordel	Delta	174	336	$389,000	$232,157	$309,000	18,024	1990
18. Annacis Island	Delta	8	955	$896,000	$348,533	$1,526,000	43,363	1990
19. Big Bend	Burnaby	285	429	$598,000	$385,180	$386,000	19,093	1988
20. Glenlyon/Marine Way	Vancouver/Burnaby	26	83	$333,000	$432,114	$705,000	22,115	1990
21. Still Creek	Burnaby	130	585	$515,000	$756,367	$202,800	9,075	1976
22. Winston	Burnaby	13	223	$924,000	$514,029	$889,000	35,206	1978
23. Lake City	Burnaby	16	554	$1,637,000	$547,568	$851,000	42,132	1974
24. Brunette/Braid	New Westminster	20	221	$486,000	$384,893	$352,000	23,505	1981
25. Pacific Reach/Cape Horn	Coquitlam	168	662	$724,000	$336,323	$564,000	19,600	1989
26. Mary Hill	Port Coquitlam	201	515	$420,000	$230,508	$508,000	17,520	1988
27. South Westminster	Surrey	321	701	$163,000	$210,832	$23,900	1,902	1965
28. Bridgeview	Surrey	134	268	$107,000	$218,881	$23,500	1,498	1955
29. Newton	Surrey	92	1,046	$404,000	$309,600	$240,000	11,796	1987
30. Port Kells	Surrey	90	620	$500,000	$350,689	$300,000	15,885	1991
31. Cloverdale	Surrey	142	342	$408,000	$271,696	$279,000	12,742	1989
32. Campbell Heights	Surrey	1,798	12	$261,000	$25,623	n/a	n/a	n/a
33. Northwest Langley	Langley	89	702	$739,000	$332,248	$633,000	21,375	1991
34. Carvolth	Langley	3	213	$459,000	$254,946	$146,500	2,942	1978
35. Willowbrook	Langley	29	107	$491,000	$347,732	$318,000	14,709	1991
36. Production Way	Langley	94	7	$283,600	$346,242	$284,000	11,224	1979
37. Mufford/Bypass	Langley	-	115	$267,000	$348,748	$279,000	8,443	1990
38. Langley Airport	Langley	22	20	$77,650	$216,704	$102,000	7,332	1977
39. Aldergrove	Langley	120	77	$398,000	$201,496	$177,000	5,253	1996
40. Gloucester	Langley	245	332	$556,000	$248,295	$926,000	29,448	1998
41. Maple Meadows	Maple Ridge	103	115	$224,000	$96,513	$426,000	12,130	1994
Greater Vancouver		**6,859**	**19,230**	**$422,000**	**$393,648**	**$294,000**	**9,793**	**1979**

Notes:

[1] Assessed land value by British Columbia Assessment Authority (BCAA) at January 1, 2004. Only 74% of the industrial inventory database records provided BCAA data for this metric. The level of data completeness for individual industrial areas could be higher or lower than 74%.

[2] Industrial area's derived average BCAA assessed land value per acre at January 1, 2004.

[3] Assessed building by BCAA at January 1, 2004. Only 70% of the industrial inventory database records provided BCAA data for this metric. The level of data completeness for individual industrial areas could be higher or lower than 70%.

[4] Median size of buildings as per the BCAA database at January 1, 2004. Only 65% of the industrial inventory database records provided BCAA data for this metric. The level of data completeness for individual industrial areas could be higher or lower than 65%.

[5] Median age of buildings as per the BCAA database at January 1, 2004. Only 65% of the industrial inventory database records provided BCAA data for this metric. The level of data completeness for individual industrial areas could be higher or lower than 65%.

Appendix D: Industrial Land Inventory Database Structure

Table D 1: Industrial Land Inventory Database Structure

Attribute	Description	Source
Parcel ID	GVRD's unique parcel identifier	GVRD
PID BCAA	Parcel identifier that links industrial parcel to BCAA and Land Titles databases	BCAA
OCP Code	Indicates parcel's official community plan code assigned by municipalities	Municipality
OCP Description	Description of OCP Code provided by municipalities	Municipality
Zoning Code	Indicates parcel's zoning code assigned by municipalities	Municipality
Zoning Description	Description of zoning code provided by municipalities	Municipality
Developed	Indicates whether parcel is 'developed' or 'undeveloped'	GVRD
Serviced	Indicates the parcel's market readiness: 'within 1 year'; 'medium-term'; or,' long-term'	GVRD
Industrial Area	Indicates the major industrial area in which the parcel is located	GVRD
Municipality	Indicates the municipal jurisdiction in which the parcel is located	GVRD
Actual Use Code	Indicates the parcels's actual use code assigned by BCAA	BCAA
AUC Description	Description of AUC Code provided by BCAA	BCAA
Parcel Coverage	Indicates whether the 'entire' parcel or 'partial' partial is within the industrial land inventory	GVRD
Industrial Status	Indicates whether parcel is OCP designated and/or zoned for an industrial use	GVRD
Shape Area	Land area of industrial parcel	GIS
Street Name	Parcel address	BCAA
Street Number	Parcel address	BCAA
Land Value	BCAA 's assessed land value at January 2004	BCAA
Improvement Value	BCAA 's assessed improvementv alue at January 2004	BCAA
Building Floor Area	Square footage of property impovements	BCAA
Year Built	Year built of property impovements	BCAA

Notes:

BCAA - British Columbia Assessment Authority database as of January 1, 2004.

The Greater Vancouver Industrial Land Inventory database contains 11,573 records.